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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,440	11/20/2000	Masato Shimakawa	450101-02342	5342
20999 7590 04/03/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER PIERRE, MYRIAM	
			ART UNIT	PAPER NUMBER
			2626	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/673,440

Applicant(s)

SHIMAKAWA ET AL.

Examiner

Myriam Pierre

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/16/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Remarks, filed 11/16/06.
2. Claims 35-66 are pending.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/08/07 has been entered.

Information Disclosure Statement

4. The information disclosure statement filed 10/16/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Response to Argument

5. Applicant's arguments with respect to claim 35 and 51 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 35-39 and 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (5,826,220) in view of Fukumochi et al. (5,321,607).

As to claim 35, Takeda et al. teach

A translation method for translating source language sentence data to target language data comprising:

accessing (translating) the source (original) language sentence (translating original sentences in a first language col. 3 lines 8-9);

accessing translation information (col. 3 lines 8-11);

wherein the translation information (translation dictionary) includes one descriptor (headword) describing the source (first) language sentence data, corresponding target (second) language sentence data (translation dictionary storing headwords in the first language and candidate translation word in the second language, col. 3 lines 10-14) , and related information (lexical rules) that limits the applicability of the target (second) language sentence data to the source language sentence data (candidate translation) (candidate translation word in the second

language corresponds to each lexical rules, col. 3 lines 10-14; the lexical rules are what limits the possible candidate translation);

determining a relationship between the source language sentence data and the translation information (translation dictionary) (Fig. 12, elements e-d, "sentence structure"; the sentence structure for the original and translated sentences are compared, thus a determination of the relationship between the source and translation information is established by analyzing the syntactic structure of the potentially matching translation, the corresponding translation is obtained through the translation dictionary);

generating one candidate as a function of the translation information (translation dictionary) and the relationship between the source language sentence data and the translation information (translation dictionary)(Fig. 27; the "Candidate Translation Word" is a function of the translation dictionary and the relationship between the source language sentence data (under "Headword") and the translation dictionary (under "Candidate Translation Word")); and

determining applicability of each translation candidate to the source language data (Fig. 28-29; under "examine " and "inspect", the applicability of each translation candidate to the source is checked) and

modifying translation information in accordance with the determined applicability of each translation candidate to the source language sentence data (a change of a translation word from that obtained by the machine translation word specified by a user is learned by registering a learning data indicating a headword, a top candidate translation word corresponding to a lexical rule applied in translating this headword, and the specified translation word, only when an original word and a top candidate translation word for this original word obtained by the

machine translation coincide with the headword and the top candidate translation word, Abstract; thus the applicability is conducted via the candidate selection process).

wherein the translation of the next sentence is a function of the modified translation information (col. 12 lines 18-24; col. 2 line 65-col. 3 line 5; modifying or changing a translation word using the updated translation information).

Takeda et al. do not explicitly teach limiting a number of translation candidates generated by limiting the translation information used in generating the translation candidates, and wherein a translation of the next source language sentence is a function of the modified and limited translation information.

However, Fukumochi et al. do teach limiting a number of translation candidates generated by limiting the translation information used in generating the translation candidates, and wherein a translation of the next source language sentence is a function of the modified and limited translation information (col. 9 line 44-col. 10 line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s translation machine into the method of Takeda et al., because Fukumochi et al. teach that this would permit a user to easily limit each part for selecting an appropriate translation thereof independently of other parts if a plurality of parts which can be interpreted in a plurality of ways are presented in an original sentence, col. 3 lines 45-51.

As to claim 51, Takeda et al. teach a translation apparatus (dictionary, Abstract) comprising:

input means for entering source language sentence data (Fig. 10)

storage means for storing translation information (col. 5 lines 14-20)

wherein translation information includes one or more descriptor describing the source language sentence data, the corresponding target language sentence data, and related information that limits the applicability of the target language sentence data to the source language sentence data (col. 3 lines 10-14; lexical rules and candidate selections are used to limit or filter data)

analysis means for determining, according to said translation information, a relationship between source language sentence data and the translation information, thereby analyzing said source language sentence data and generating one or more translation result candidates (col. 3 lines 10-14 and Figs. 10, 12-14);

target language sentence generation means for generating said target language sentence data as a translation of said source language sentence data (Figs. 10, 12-14);

modifying means for modifying translation information in accordance with a determined applicability of each translation candidate to the source language sentence data (a change of a translation word from that obtained by the machine translation word specified by a user is learned by registering a learning data indicating a headword, a top candidate translation word corresponding to a lexical rule applied in translating this headword, and the specified translation word, only when an original word and a top candidate translation word for this original word obtained by the machine translation coincide with the headword and the top candidate translation word, Abstract);

wherein the translation of the next sentence is a function of the modified translation information (col. 12 lines 18-24; col. 2 line 65-col. 3 line 5; modifying or changing a translation word using the updated translation information); and

output means for outputting said target language sentence data generated by said target language sentence generation means (Figs. 10, 12-14).

Takeda et al. do not explicitly teach limiting a number of translation candidates generated by limiting the translation information used in generating the translation candidates, and wherein a translation of the next source language sentence is a function of the modified and limited translation information.

However, Fukumochi et al. do teach limiting a number of translation candidates generated by limiting the translation information used in generating the translation candidates, and wherein a translation of the next source language sentence is a function of the modified and limited translation information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s translation machine into the method of Takeda et al., because Fukumochi et al. teach that this would permit a user to easily limit each part for selecting an appropriate translation thereof independently of other parts if a plurality of parts which can be interpreted in a plurality of ways are presented in an original sentence, col. 3 lines 45-51.

As to claims 36 and 52, which depends on claims 35 and 51, Takeda et al. teach

related information supports an interpretation of a meaning of said target language sentence data corresponding to said source language sentence data accessed (col. 3 lines 10-15; translation based on lexical rules in translation dictionary, which is inherent to interpretation of a meaning of target language sentence).

As to claims 37 and 53, which depends on claims 36 and 52, Takeda et al. teach related information contains a check source language sentence as a variation of said target language sentence data corresponding to said source language sentence data accessed (Fig. 25A-C and Fig. 27; lexical rules or related information contains 'check source language' which corresponds with the 'candidate translation word' or target language, translating words is inherent to the process of translating sentences)

As to claims 38 and 54, which depends on claims 37 and 53, Takeda et al. teach a description of said check source language sentence is omitted in said translation information when said source language sentence data matches the check source language sentence that is described in the translation information (Fig. 12; "Subject" "Object" and "Definitive" are omitted in element e, the Translated sentence Syntactic Structure" when there is a match, see a-c, J2 in element b was chosen and the object "transportation means" is omitted).

As to claim 39 and 55, which depends on claims 37 and 53, Takeda et al. teach wherein related information includes at least one of a status explaining sentence in said source language that explains the status where said check source language is used (Fig. 12

elements a-c; the “Object” “Transportation means” are status explaining in source language regarding were the check source language is used, such as in Fig. 25 A-C).

As to claims 40 and 56, which depend on claims 35 and 51, Takeda et al. teach related information

Takeda et al. do not explicitly teach prediction of next source language.

However, Fukumochi et al. do teach predicted next source language sentence data based on the source language sentence that has been accessed (Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.’s predict next source language sentence based on the source language sentence for interpreting sentences into the method of Takeda et al., because Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

As to claims 41 and 57, which depend on claims 35 and 51, Takeda et al. do not explicitly teach field information for limiting predicted next source language sentence.

However, Fukumochi et al. do teach

field information that is used for limiting predicted next source language sentence data (col. 3 lines 58-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.’s limit field information into the method of Takeda et al. because Fukumochi et al. teach that this would permit a user to easily limit each part for

selecting an appropriate translation thereof independently of other parts if a plurality of parts which can be interpreted in a plurality of ways are presented in an original sentence, col. 3 lines 45-51.

As to claims 42 and 58, which depend on claims 35 and 51, Takeda et al. teach wherein said related information includes source language sentence (Fig. 25A-C and Fig. 27).

Takeda et al. do not explicitly teach response sentence prediction.

However, Fukumochi et al. do teach at least one of a response sentence that necessarily predicts a response to said source language sentence data (Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s predict next source language sentence based on the source language sentence for interpreting sentences into the method of Takeda et al., because Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

As to claims 43 and 59, which depend on claims 35 and 58,

Takeda et al. teach the translation method as claimed in claim 35,

further comprising the steps of:

determining whether a translation result of said source language sentence data is a corresponding target language sentence data in accordance with said related information (Fig. 20B; the flow chart is an example of verification process that the translation result matches the

source in accordance with related information or lexical rules (lexical rules are part of candidate translation process in element 719); and

reporting that said source language sentence data cannot be translated when no target language sentence data corresponds to said source language sentence data based on said related information (when there is no appropriate translation word in the display list at step 717, the user presses a registration key, the system is switched to a translation word input mode, col. 11 lines 39-44; the method of switching from the list to the registration key is necessarily reporting that there isn't a translation, thus the need to update the system by registering the new word).

As to claims 44 and 60, which depend on claims 35 and 51;

Takeda et al. teach wherein target language sentence data is accessed and translated into the source language sentence data (Fig. 12).

As to claims 45 and 61, which depend on claims 44 and 60,

Takeda et al. teach wherein said related information

Takeda et al. do not explicitly teach predicting the next target language sentence data. However, Fukumochi et al. do teach includes predicted next target language sentence data based on the target language sentence that has been accessed (Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s predict next source language sentence based on the source language sentence for interpreting sentences into the method of Takeda et al., because

Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

As to claims 46 and 62, which depend on claims 44 and 60,

Takeda et al. teach related information.

Takeda et al. do not explicitly teach limiting prediction of next target language sentence based on the accessed source language sentence.

However, Fukumochi et al. do teach

wherein said related information includes field information that is used for limiting predicted next target language sentence data based on the source language sentence data that has been accessed (col. 3 lines 58-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s limit field information into the method of Takeda et al. because Fukumochi et al. teach that this would permit a user to easily limit each part for selecting an appropriate translation thereof independently of other parts if a plurality of parts which can be interpreted in a plurality of ways are presented in an original sentence, col. 3 lines 45-51.

As to claims 49 and 65, which depend on claims 35 and 51, Takeda et al. do not explicitly teach response prediction.

However, Fukumochi et al. do teach wherein response prediction information is generated in response to said source language sentence data accessed, and the response prediction information that is generated is presented (col. 3 lines 58-67 and Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s limit field information into the method of Takeda et al. because Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

As to claims 50 and 66, which depend on claims 49 and 65, Takeda do not explicitly teach response prediction.

However, Fukumochi et al. do teach wherein said response prediction information includes at least one of a response described as said related information in the translation information corresponding to said source language data (col. 3 lines 58-67 and Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s limit field information into the method of Takeda et al. because Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

3. Claims 47 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et

al. (5,826,220) in view of Fukumochi et al. (5,321,607). as applied to claim 35 above, in further view of Kleinschmidt et al. (6,085,112).

As to claims 47 and 63, which depends on claims 35 and 51,

Takeda et al. teach source and target language.

Takeda et al. in view of Fukumochi et al. does not explicitly teach voice input or voice output.

However, Kleinschmidt et al. do teach

wherein said source language sentence data is accessed and recognized as voice data and said target language data is generated and output as voice data (speech input and output means, foreign translation within scope of communication device, col. 3 lines 35-37 and col. 4 lines 64-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Kleinschmidt et al.'s process source and translated language as input and output into the method of Takeda et al. in view of Fukumochi et al., because an artisan of ordinary skill in the art would permit commands to be issued to the device without using hands and/or permits message from the device to be perceived without the eyes, (Kleinschmidt et al. col. 3 lines 35-40).

As to claims 48 and 64, which depends on claims 47 and 63,

Takeda do not explicitly teach predicting the next source sentence.

However, Fukumochi et al. do teach predicted next source language sentence data based on the source language sentence data that has been accessed (col. 3 lines 58-67 and Figs. 14 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Fukumochi et al.'s limit field information into the method of Takeda et al. because Fukumochi et al. teach this would provide a representation showing how the next candidate translation for the designated range is displayed, col. 5 lines 18-21.

Takeda et al. teach wherein said related information

Takeda et al. in view of Fukumochi et al. do not explicitly teach including predicting the next source language sentence or voice recognition.

However, Kleinschmidt et al. do teach voice recognition (speech recognition, col. 8 line 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Kleinschmidt et al.'s limit field information via voice recognition into the method of Takeda et al. in view of Fukumochi et al., because Kleinschmidt et al. teach that would permit commands to be issued to the device without using hands and/or permits message from the device to be perceived without the eyes, (Kleinschmidt et al. col. 3 lines 35-40).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure see the attached PTO-892.

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on Monday – Friday from 8:30-5:30p.m.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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03/22/07

Angela Armstrong